# Transportation Projects in the Lake Worth Area

Presented to: Lake Worth Regional Coordination Committee

Dan Kessler, Assistant Director of Transportation June 9, 2016

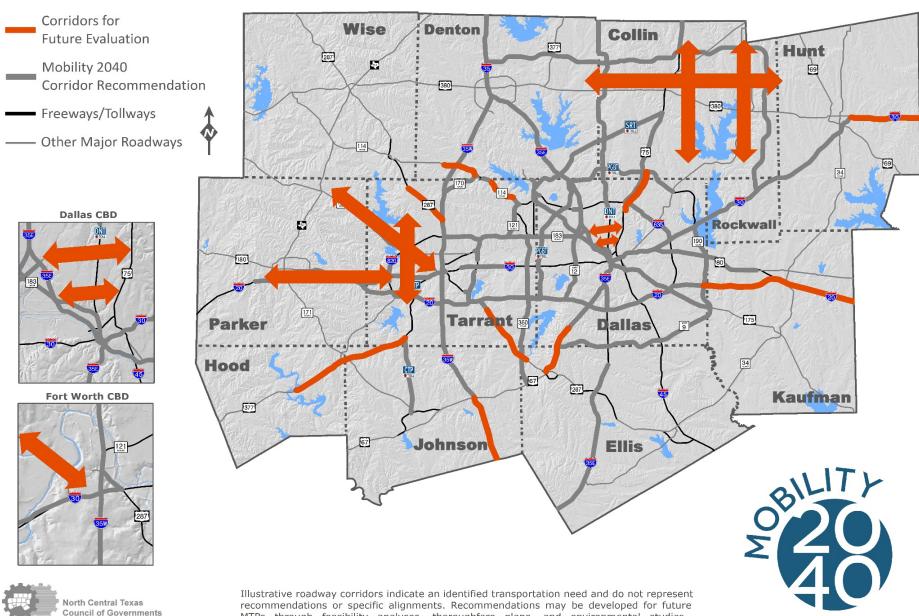


## Population Forecast by County

County	2010 Population	2040 Population	2010 – 2040 Change
Collin	778,427	1,560,421	781,994
Dallas	2,337,741	3,357,469	1,019,728
Denton	652,270	1,241,681	589,411
Ellis	148,000	283,898	135,898
Hood	50,481	81,578	31,097
Hunt	84,260	131,022	46,762
Johnson	148,290	252,521	104,231
Kaufman	102,014	210,097	108,083
Parker	113,806	195,286	81,480
Rockwall	77,678	166,357	88,679
Tarrant	1,788,400	3,094,649	1,306,249
Wise	58,147	101,865	43,708
Total	6,339,514	10,676,844	4,337,320

Source: U.S. Census Bureau, NCTCOG

#### **Illustrative Major Roadway Corridors for Future Evaluation**



March 2016

### Planning Livable Military Communities (PLMC)

#### **Funding**

#### **HUD Community Challenge Grant**

• \$800,000 for 2-Year Study

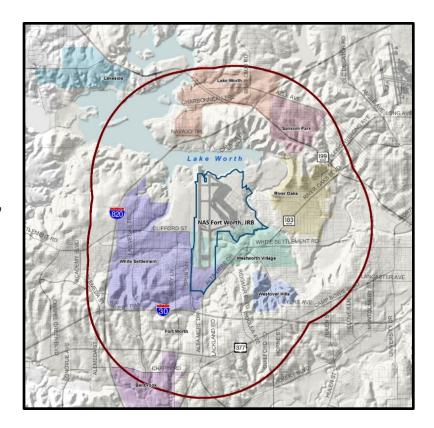
#### **Focus Area**

## 2.5 Mile Buffer around NAS Fort Worth, JRB

- 7 Diverse Communities with Common Challenges
- Changing Demographics

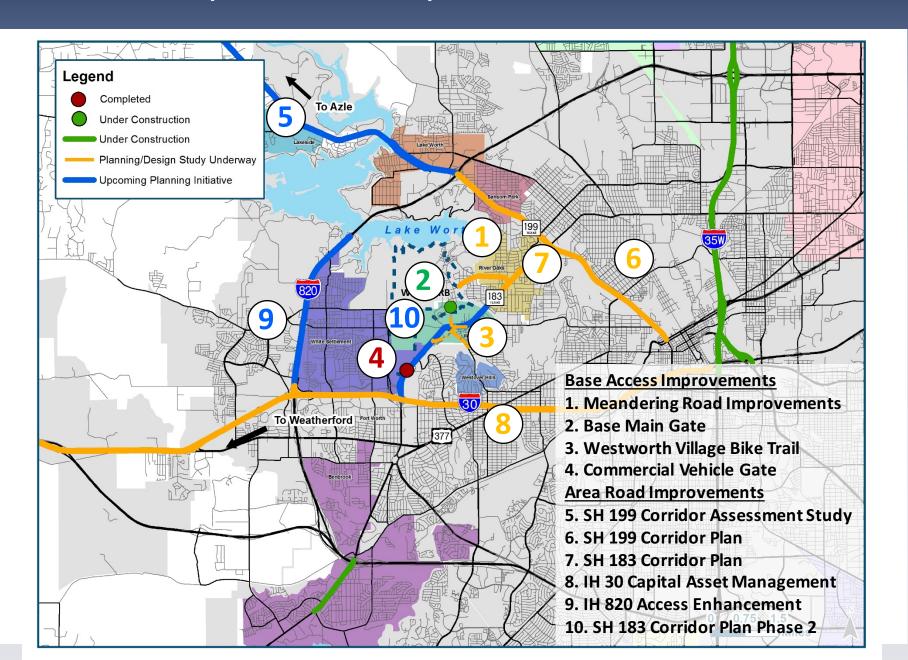
## **Project Activities Multidisciplinary Planning Studies**

- Housing and Retail Feasibility
- Enhanced Transportation Options
- Building Code Review

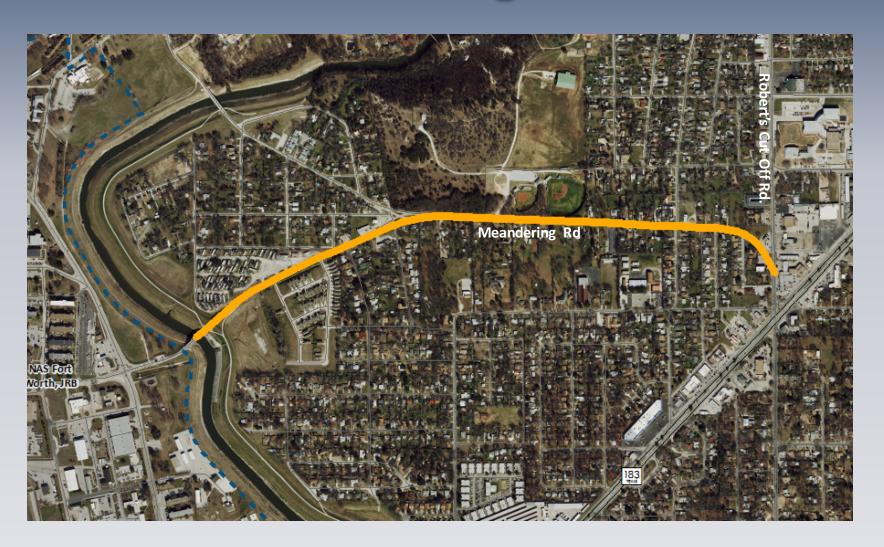


- Comprehensive Plan Updates
- Public Involvement

#### PLMC Transportation Implementation



## Meandering Road

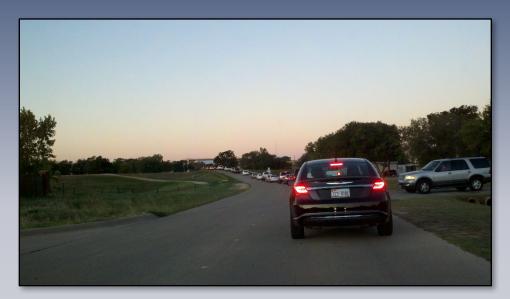


### Importance of Meandering Road

- Serves as main access point for the NAS Fort Worth, JRB east gate entrance
- > 1,800 vehicles per day enter through east gate
- Higher traffic counts on drill weekends
- Additional roadway users include FMC Carswell, YMCA Camp Carter, Burger Lake, and gas well traffic

\$1,000,000 identified for preliminary design and engineering of road improvements.

## Need for Improvements

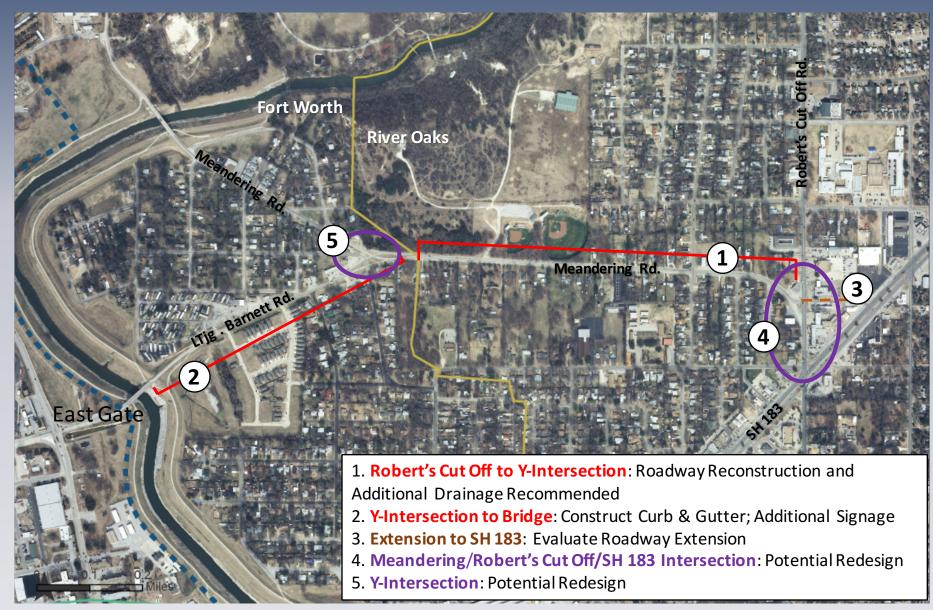








### **Existing Conditions**



### **Preliminary Design Concepts**



#### Meandering Road/ Roberts Cut Off Road Intersection



#### **Basic Design Assumptions:**

3-lane Meandering Road (2 westbound/1 eastbound)
3-lane Roberts Cut-Off Road south of Meandering Rd

#### Considerations:

School Zone on Ohio Garden Road School Zone on Roberts Cut Off Road Right-Angle Intersections Queuing at Intersections Base Access from Northbound SH 183 Base Access from Southbound SH 183 Base Access from Roberts Cut Off Road

#### Pros:

Concentrates Base Traffic Reduces Parking Lot Cut-Through Traffic Reduces Traffic through School Zones Avoids US Post Office (1008 Roberts Cut Off Road) Maintains Traffic Signal Spacing on SH 183 Ability to Redevelop a Portion of Meandering Road

#### Cons

Signal Delay for Southbound Roberts Cut Off Road Impacts New Quickway (1001 Roberts Cut Off Road)



### **Preliminary Design Concepts**

Meandering Road, LTjg Barnett Road, Gillham Road and Brocks Lane Intersection

#### **Roundabout Alternative**

#### **Basic Design Assumptions:**

3-lane Meandering Road (2 westbound/1 eastbound)

#### Considerations:

NAS JRB Access YMCA Camp Carter Access Local Residential Traffic Traffic Control Delay Driver Expectations Drainage

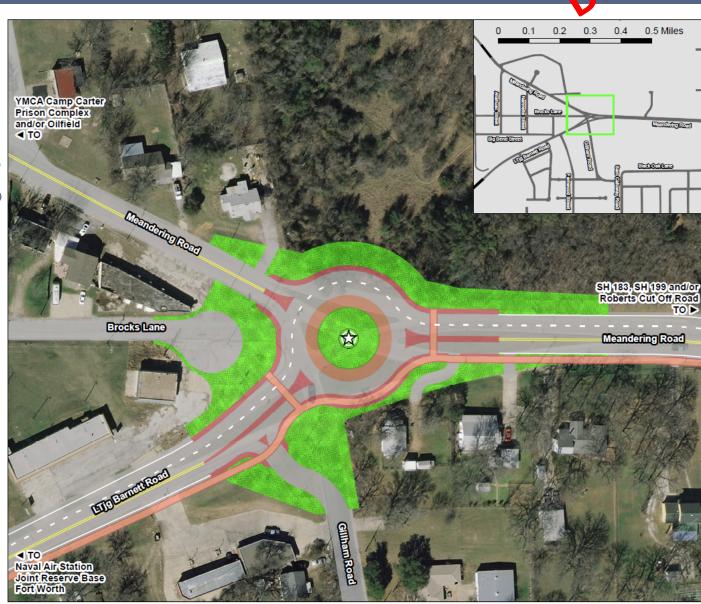
#### Pros:

Simplifies Current Configuration Reduced Traffic Control Delay Opportunity for Oversized Vehicles to Turn Around Dedicated Pedestrian/Bicycle Movement Place-Making/Monument Within Roundabout

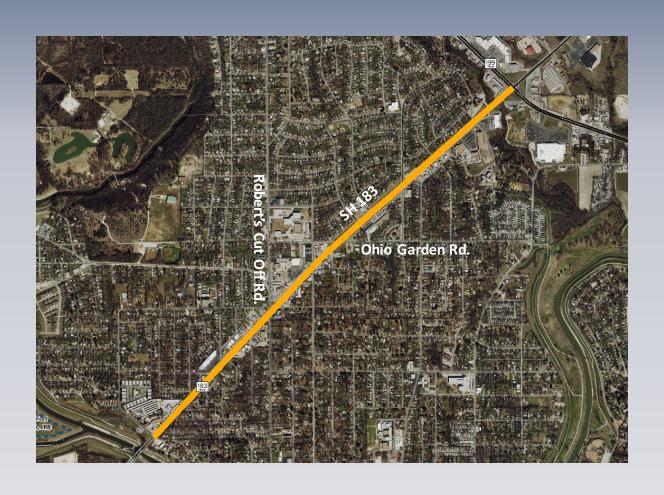
#### Cons:

Grade Changes Considerably in Roundabout Roundabout Configuration Learning Curve Brocks Lane Dead Ends Gillham Road Limited to Right-In/Right-Out Access Limited Driveway Access Near Roundabout Eastbound Meandering Road Crosses Two Lanes

50 100 150 Feet



## River Oaks Boulevard (SH 183) Corridor Master Plan



### River Oaks Boulevard (SH 183)



**BOULEVARD CONCEPT** 



### Visual Preference Survey Results

#### **Elements ranking "Very Appropriate" by majority:**









### **Proposed Corridor Features**

- Sidewalks
- Pedestrian Amenities: lighting, landscaping, benches, signage, trash receptacles, etc.
- Off Street Shared-Use Path (Sidepath)
- Stormwater improvements: new storm drains, bio-retention, etc.
- Roadway/Intersection Improvements and traffic light enhancements





#### **Zone Concepts**

Three Context Sensitive Zones

Defined by Right-of-Way Width

Adjacent Land Uses

City Hall



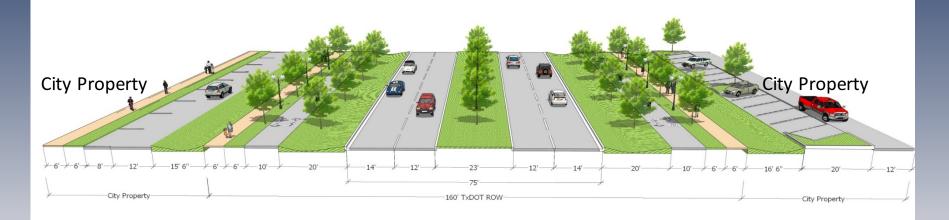
## Three Edge Treatments

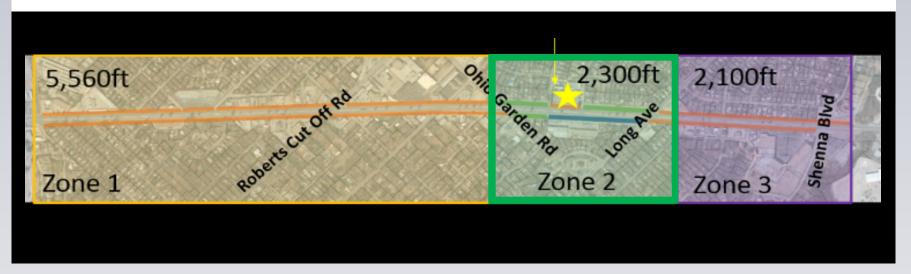
Shared Use Path and Sidewalk(s)

Parallel Parking \_\_\_\_\_

Angled Parking

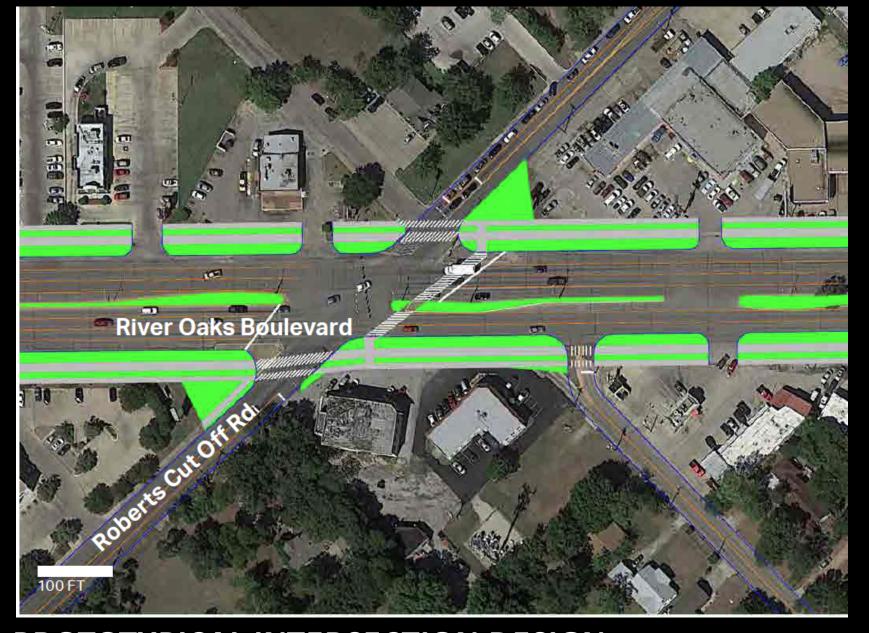
#### **CONTEXT ZONE 2**





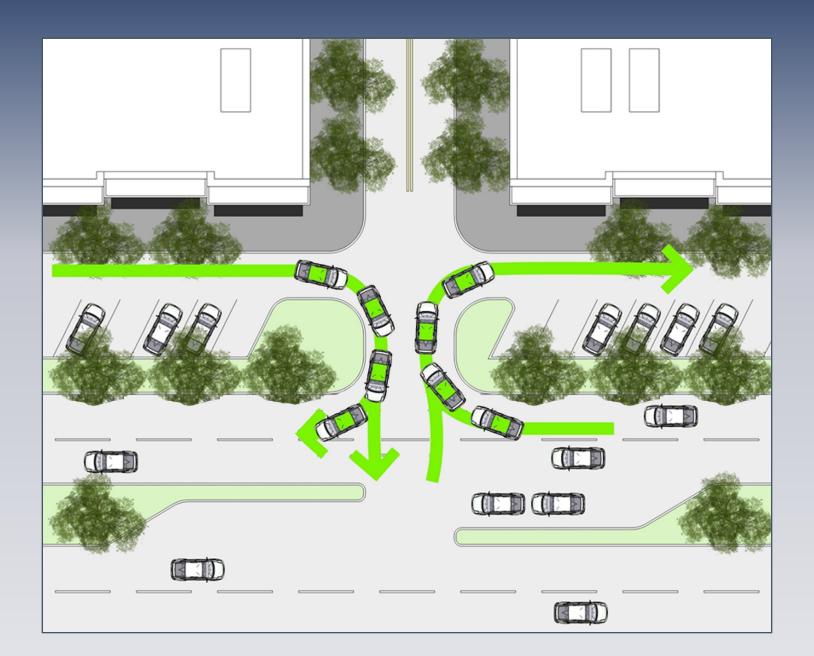


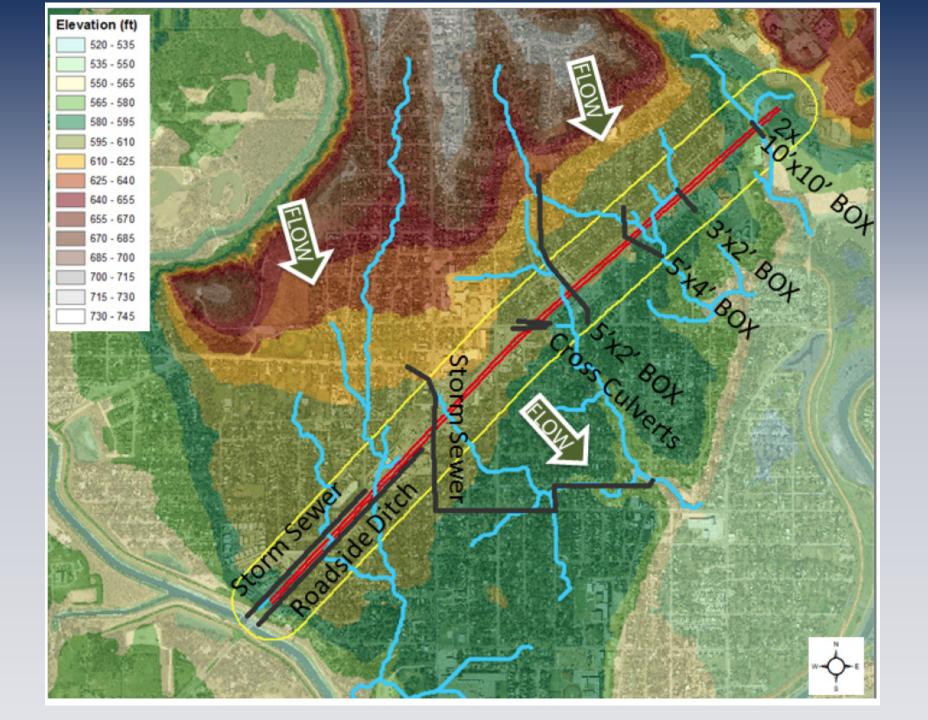
### **CONTEXT ZONE 2 – AERIAL VIEW**



PROTOTYPICAL INTERSECTION DESIGN—River Oaks Blvd / Robert's Cut Off Rd

### SH 183 Corridor Enhanced Access Concept





#### Stormwater Recommendations

#### Coordinate with Regional Agencies

- Request the Texas Department of Transportation (TxDOT) to regrade ditches and clean out culverts
- Coordinate with Tarrant Regional Water District and Tarrant County to seek funding for a more detailed drainage study to document issues and make additional recommendations for improvements

## Implement stormwater management solutions as reconstruction of River Oaks Boulevard occurs

- Incorporate drainage features into the aesthetic landscaping to maximize infiltration and provide surface storage for retaining stormwater runoff: bio-swales, bio-retention
- New storm sewer trunk line on each side of the road that would connect to the bio-retention underdrains
- The proposed corridor layout provides opportunities to maximize innovative stormwater management practices: Low Impact Development (LID), Green Infrastructure (GI), Integrated Stormwater Management (iSWM)

#### Reinvestment Nodes



Node 1: Mixed-use village center

Civic and restaurant uses

Blend of residential uses (attached and detached) including seniors, townhomes, lofts, and small lot single family

**Central green amenity** 

**Emphasis on placemaking** 

## **Node 2:** Commercial/retail reinvestment zone

Restaurants, neighborhood shopping, and small service office

Anchored by the new Walmart on the other side of River Oaks Blvd.

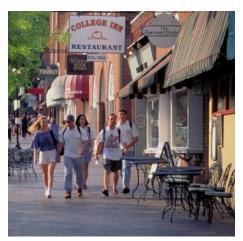
### Node 1 – Mixed Use Village Center

Node 1: Mixed-Use Village Center – 10 Year Project Programming

Development Type	Node 1 Project Programming	Quantity
Retail	Food, Bev. Restaurants	10,000 SF
	Neighborhood Retail	10,000 SF
	Clothing & Accessories	5,000 SF
Office	Small Office	10,000 SF
Residential	Urban Residential	380 DU
Residential	For Sale Residential	65 DU







**Mixed-Use Community Core** 

**Three-Story Residential Flats** 

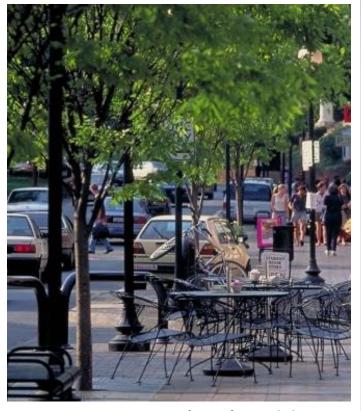
### Node 2 – Commercial/Retail Reinvestment Zone

#### Node 2: Commercial/Retail Reinvestment Zone – 10 Year Project Programming

Development Type	Node 2 Project Programming	Square Feet
Retail	Motor Vehicle and Parts	5,000
	Furniture and Furnishings	5,000
	Building Materials/Supply	10,000
	Food, Beverage, Grocery	20,000
	Sporting Goods, Hobby	5,000
Office	Electronics, Office General	20,000
	Small Office	20,000

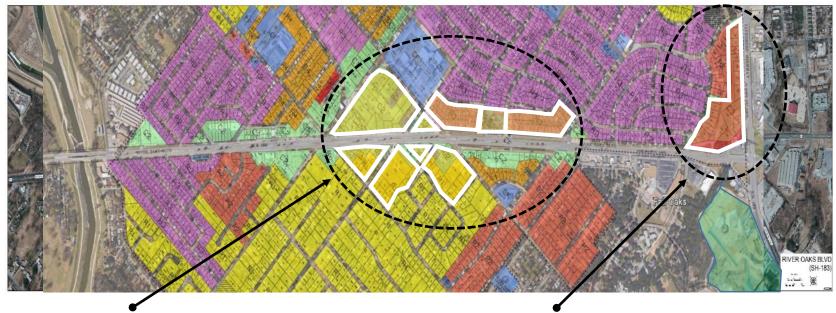


Village Center Retail and Small Office



**Restaurants and Outdoor Dining** 

### Reinvestment Zoning Strategy



Node 1: Mixed-use village properties

**Form-Based Planned Development District** 

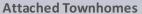
Emphasis on maximum building setbacks, streetscape improvements, building materials, building heights, and special conditions including key corners and potential locations of public open space features

**Node 2:** Commercial/retail reinvestment properties

Updated building material and landscape standards for existing commercial/retail zoning districts

# Form Based Design Concepts – Focus on Visual Preference Survey







**Senior and Independent Living** 



Mixed-Use Residential/Office Retail



**Streetscape-Based Development** 

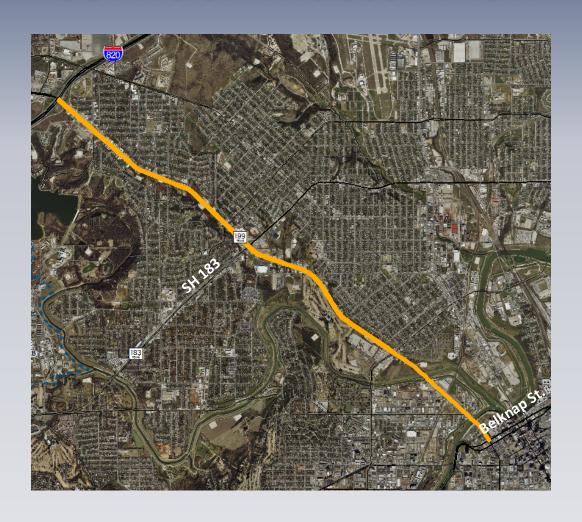




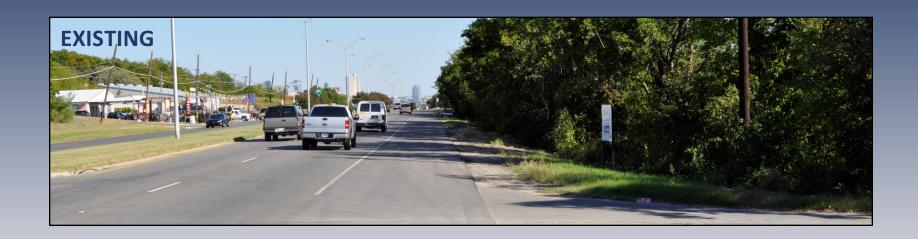


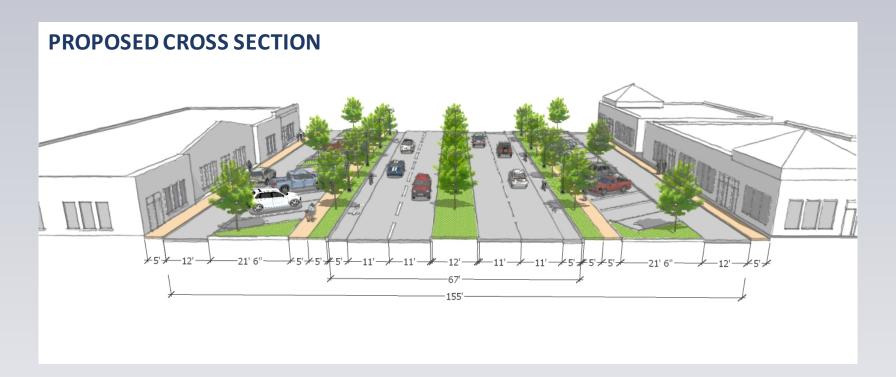


## State Highway 199 Corridor Master Plan



### State Highway 199 Corridor Master Plan





### State Highway 199 Corridor Master Plan





### State Highway 199 Corridor Master Plan

#### **Partners:**

- Sansom Park
- Lake Worth
- Fort Worth
- Tarrant County

- TxDOT
- NCTCOG
- Freese and Nichols

#### **Project Limits:**

Downtown Fort Worth to IH 820

#### **Study Emphasis Areas:**

- Drainage Improvements
- Transportation Options
- Economic Development Opportunities
- Context-Sensitive Design Solutions

#### **NCTCOG Staff Contacts**

#### **Dan Kessler**

Assistant Director of Transportation (817) 695-9248 dkessler@nctcog.org

Sandy Wesch, P.E., AICP

SH 199 Study Contact
Project Engineer
(817) 704-5632
swesch@nctcog.org

Karla Weaver, AICP

SH 183 Study Contact
Program Manager
(817) 608-2376
kweaver@nctcog.org

A copy of today's presentation can be found at:

http://www.nctcog.org/trans/presentations/index.asp